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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/719,498 | 11/20/2003 | Hwangsoo Choi | LINFIN.053C3 | 3019 |
| 20995 | 7590 | 12/02/2004 | EXAMINER | |
| KNOBBE MARTENS OLSON & BEAR LLP | | | ALEMU, EPHREM | |
| 2040 MAIN STREET | | | ART UNIT | |
| FOURTEENTH FLOOR | | | PAPER NUMBER | |
| IRVINE, CA 92614 | | | 2821 | |

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,498

Applicant(s)

CHOI

Examiner

Ephrem Alemu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-15-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Information Disclosure Statement***

1. The information disclosure statement filed on 3-15-04, partially, fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the document numbers, US23161164 and US22180380, cannot be found. It has been placed in the application file, but the information referred to the document numbers, US23161164 and US22180380 has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing elements will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,654,268. Although the conflicting claims are not identical, they are not patentably distinct from each other because both

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the instant application and the issued patent claim a power conversion circuit for driving a fluorescent lamp, and a method and a power conversion circuit for driving a fluorescent lamp at a reduced brightness level.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Henry (US 5,923,129) submitted by applicant.

Re claim 1, Henry discloses a power conversion circuit (i.e., controller 20) for driving a fluorescent lamp (5) (Figs. 2-4), the circuit comprising:

a controller (i.e., controller 20) configured to generate signals with active states and inactive states, wherein durations of the respective active states are equal to or greater than an updated duration determined by a first pulse generator circuit (i.e., signal generation circuit, 130) which monitors cycles of current flowing through the fluorescent lamp with respective amplitudes above a preset threshold (Figs. 3, 4; Col. 2, lines 38-56; Col. 4, line 14- Col. 5, line 40).

Re claim 2, Henry further discloses at least one control signal is provided to the controller indicating a control value for comparison with a value indicative of the number of cycles of current flowing through the fluorescent lamp (i.e., current sense input C_S) with respective

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amplitudes above a preset threshold (i.e., external reference provided at I_{SET}) (Figs. 2-4; Col. 4, lines 14-44).

Re claim 3, Henry further discloses the controller comprises:

a pulse width modulation circuit (120);

an oscillator circuit (110, 144), and

a dimming control circuit (140) (Figs. 3-4; Col. 4, lines 14-17).

Re claims 11 and 12, Henry discloses a method and a power conversion circuit (i.e. drive circuit 500) for driving a fluorescent lamp at a reduced brightness level comprising:

means for providing an AC (i.e., DC blocking capacitor 510) voltage to the fluorescent lamp during an on-time (Fig. 6; Col. 8, lines 33-44);

means for keeping track of desired cycles (i.e., current sense input (I_S) of the PWM circuit 502) in an AC current flowing through the fluorescent lamp in response to the AC voltage, wherein amplitudes of the respective desired cycles exceed a preset threshold (Fig. 6; Col. 8, lines 33-59); and

means for adjusting (i.e., PWM 502) the on-time to achieve a selected number of the desired cycles (Fig. 6; Col. 8, lines 60-67).

Re claim 13, Henry discloses a power conversion circuit (i.e. drive circuit 500) for driving a fluorescent lamp (Fig. 3), the circuit comprising:

a controller (i.e., PWM 502) configured to generate signals with active states and inactive states based in part on an input (i.e., $+V_{BRITE}$) from a first pulse generator circuit which monitors cycles of current (i.e., via the current sense input I_S) flowing through the fluorescent lamp (CCFL

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526) with respective amplitudes above a preset threshold (i.e., desired current) (Fig. 6; Col. 7, line 32- Col. 8, line 67).

Conclusion


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Xia et al. (US 5,872,429); also teaches similar inventive subject matter.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Don Wong
Supervisory Patent Examiner
Technology Center 2800

EA
11-28-04